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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,391	01/16/2004	Kishan Shenoi	SYMM/0015	6684

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EXAMINER	
QURESHI, AFSAR M	
ART UNIT	PAPER NUMBER
2616	
MAIL DATE	DELIVERY MODE
05/29/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/759,391	SHENOI, KISHAN	
	Examiner	Art Unit	
	AFSAR M. QURESHI	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 May 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15,18-46,49-68,71-82 and 85-98* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1-15,18-46,49-61,71-82 and 89-98* is/are allowed.

6)☒ Claim(s) *62-68,85-88* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Response to Amendment

1. This Office Action is responsive to amendment received on 5/9/2008. Cancelled claims 16,17,47,48,69,70,83 and 84 made of record. Amended claims entered as requested.

Response to Arguments

2. Applicant's arguments filed 5/9/2008 have been fully considered but they are not persuasive.

In reference to amended claims 62 and 85, Applicant argued that cited prior art references, Wang (US 6,985,442) and Glover (US 5,379,297) fail to disclose "segmenting outbound packets at a *packet router"* (page 18).

However, Examiner maintains that Source/Destination units disclosed by Glover (fig. 2) have processors performing packet switching functionality. By definition, also admitted by Applicant in Related art (see [0017]) packet switching unit can be considered as router since the principle function of the router is to process incoming packets (see figure 5, Prior Art', of the Disclosure) associated with the protocol. It is, therefore, readily obvious to one of skill in the art, to be able to incorporate functionalities disclosed in reference to units 4-S and 4-D of Glover (fig. 2) into the edge routers, coupled to source and destination, of Wang and be able to process incoming packets accordingly.

Based on above, Examiner maintains the rejection of claims 62-68 and 85-88.

3. **The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action**.

4. Claims 62-68 and 85-88 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al. ('Wang' hereinafter), US 6,985,442 in view of Glover et al. '(Glover' hereinafter), US 5,379,297.

As to claims 62, 63, 68, 85 and 86. Wang discloses a network of interconnected edge (131, 141, etc.) and core routers (see Abstract and fig. 1) providing transmission bandwidth on single trunk, flow evaluation by dividing the flow into thin layers and assigning packet level operating on a single packet stream (see col. 5, lines 5-34).

As to claims 64 and 65. Wang discloses dynamically varying threshold based on level of congestion (see col. 9, lines 33-40).

As to claims 66 and 67. Wang discloses buffering packets using queues and giving weight (priority) to the buffered plurality of packets (see col. 3, lines 6-14 and col. 9, lines 11-40).

Wang, however, discloses discarding the packets when the backlogged packets exceed some threshold.

Wang does not disclose restricting packet size, at the first packet router, by segmenting the outbound packet.

Glover, in the same field of endeavor, teaches a multi-channel segmenting (element 103) packets for transmitting over channels in ATM network and reassembling packets at the receiving end (figs. 1 and 2) using a second processor 103' (fig. 2). The cell unit 103 is a segmentation processing unit located at packet switching unit [in ATM packet switching units at edge network can functionally be the same as routers] segmenting packets for transmission of ATM path 108 (trunk) over an ATM network 1 t ATM path 109 (see col. 8, lines 29-37).

Wang is concerned with fair bandwidth sharing and buffering management conditions where packets are dropped based on comparison to the level threshold. One of ordinary skill in the art would readily realize that discarding a packet may not be advantageous. However, the technique of resizing packets for transmission using segmenting and re-segmenting techniques, used by Glover, is more advantageous since discarding packets, if carried too far, results in inefficient operation since the transmission tends to increase traffic in an already congested network. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of invention, to be able to modify Wang by including cell unit segmentation and re-assembly units in the core routers, as suggested by Glover, in order to realize an efficient transmission in the context of congestion control, sought by Wang.

Allowable Subject Matter

5. Claims 1-15, 18-46, 46-61, 71-82 and 89-98 are allowed over prior art of record.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AFSAR M. QURESHI whose telephone number is (571)272-3178. The examiner can normally be reached between 8 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Field Lynn can be reached on (571) 272 2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Afsar M Qureshi/
Primary Examiner
Art Unit 2616

5/24/2008